

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Hsieh et al.

Application No.: 10/761,660

Filed: January 20, 2004

For: NANO-POROUS FIBERS AND  
PROTEIN MEMBRANES

Customer No.: 20350

Confirmation No. 3387

Examiner: David M. Naff

Technology Center/Art Unit: 1657

DECLARATION OF YOU-LO HSIEH  
UNDER 37 C.F.R. § 1.131

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

1. I, You-Lo Hsieh, being duly warned that willful false statements and the like are punishable by fine or imprisonment or both (18 U.S.C. § 1001), and may jeopardize the validity of the patent application or any patent issuing thereon, state and declare as follows:

2. All statements herein made of my own knowledge are true, and statements made on information or belief are believed to be true and correct.

3. I am a named inventor on the above-referenced patent application. I am an inventor of claims 1-43 of the above-identified patent application and of the subject matter described therein.

4. Prior to February 28, 2002, I and my co-inventors had completed the invention of the nano-porous fibers and protein membranes as described and claimed in the above-identified application in the United States as evidenced by the following.

5. Prior to February 28, 2002, I and my co-inventors conceived and diligently reduced to practice the chemical synthesis and processing of nano-porous fibers with diameters

in the range of 102 nanometers and nanometer-sized pores from both natural and synthesized polymers, as evidenced by the attached Disclosure and Record of Invention Form submitted to the U.C. Davis Technology Transfer Center (Exhibit A). My co-inventors and I carried out the conception and reduction of this invention and/or had the work performed under my supervision and control.

6. Each of the dates redacted from attached Exhibit A is prior to February 28, 2002.

7. I submit that the above-stated facts and attached exhibit clearly establish that I and my co-inventors conceived of and reduced to practice the claimed invention prior to the February 28, 2002 publication date of the PCT application, which eventually issued as U.S. Patent No. 6,790,528 to Wendorff *et al.*

8. The Declarant has nothing further to say.

Date: 3/24/07

By:



You-Lo Hsieh, Ph.D.

DISCLOSURE AND RECORD OF INVENTION FORM

Section 1.

Please list all UC Davis inventors and the designated UC Davis department or ORU that should receive credit for the invention.

Inventor(s) first & last names:	UC Home Department Name to receive credit for invention.	Other UC Davis Dept. or ORU appointments? If yes, please name department or ORU.
<b>You-Lo Hsieh</b>	<b>Textiles</b>	
<b>Haiqing Liu</b>		
<b>Lifeng Zhang and Corine Cicile</b>		

Section 2.

1. Short descriptive title of the invention.  
**Functional nanoporous and ultra-fine fibrous membranes**
- 2A. Briefly summarize the invention here. Include the novel features and advantages.  
Chemical synthesis and processing methods are combined to create fibers from both natural and synthesized polymers with diameters in the range of 102 nm and nanometer-size pores. These porous fibers contains two order or higher specific surface than any conventional fibers and an expand technical applications in areas including selective chemical conversion, solid support catalysts, membrane supported smart materials, scaffolds for tissue/cell growth, and membranes for immobilizing biological and pharmacologically active agents and molecules.
- 2B. Detailed description of the invention using additional sheets as necessary and attach as an Appendix. Please attach any manuscripts, publications, and other documents to the form.  
See report and paper attached via email (b)(6)(b)(7)(C)
- 3.A. List the funding source(s) for the project under which this invention was made. If applicable, identify by contract or grant number and name the Principal Investigator/Supervisor of each.

Funding Source/Sponsor	Contract or Grant Number	Principal Investigator/Supervisor
<b>Faculty Research Grant (b)(6)(b)(7)(C)</b>		<b>You-Lo Hsieh</b>
<b>National Textile Center</b>	<b>pending</b>	<b>You-Lo Hsieh</b>

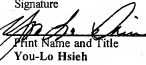

- 3.B. This invention utilized data or materials from (check as many as apply):
  - ☐ Celera's proprietary database
  - ☐ Affymetrix chips
  - ☐ A Material Transfer Agreement – "MTA" – (or any other document transferring non-UC material)
  - ☐ Other proprietary sources (specify):
4. For any Inventor named (item 14) who is not employed full-time by the University of California, please identify other employers (e.g., Veterans Administration, Howard Hughes Medical Institute, USDA), the percent of salary time funded by such other employer, and the nature of the other employment (such as research, teaching or clinical duties).
5. When did you first conceive this invention?  
(b)(6)(b)(7)(C)
6. What is the date of the first written record (notebook, letter, proposal, drawing, etc.) of this invention? Identify the document, page numbers involved, and location of the document.  
(b)(6)(b)(7)(C)

**EXHIBIT**

A

7. When did you first successfully test this invention?  
[REDACTED]
8. If you have disclosed this invention to non-UC personnel (including research sponsor) then indicate when, under what circumstances, and to whom. **Please provide copies of abstracts, handouts, papers, posters, and other communications.**
- a. orally  
**Ph.D. student oral** ([REDACTED])
  - b. in writing  
**Ph.D. student oral proposal** ([REDACTED])
  - c. by actual use, demonstration, handouts, or posters
9. Have you submitted or do you plan to submit a report, abstract, paper or thesis relating to this invention for publication, for presentation at a conference, or to a research sponsor?  
One proposal was submitted to the National Textile Center ([REDACTED]).
10. If yes, give details, including the actual or planned date of submission. If a manuscript has been accepted, give the anticipated publication date. Append a copy of the latest draft manuscript available. (See instructions for the effect of publication prior to the filing of a patent application.)
11. Identify any references, patent applications, or other publications of which you are aware and which you believe to be pertinent to this invention. Please attach a copy of each of these references, if available. Please also include 4-6 keywords related to your invention to assist us in our searches.
12. If any proprietary material (e.g., cell line, antibody, plasmid, computer software, or chemical compound) obtained from outside your laboratory was used to develop this invention under a restrictive written or oral transfer agreement (other than a normal purchasing agreement), please attach a copy or summary of that agreement.
13. List companies you believe might be interested in using, developing or marketing this invention.
14. ☐ I would like to discuss contributing a portion of royalties to the Genetic Resources Recognition Fund, a UC Davis program established to share a portion of the benefits derived from UC inventions with third world scientists.

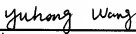
## 15. Signatures, Names, and Addresses of Inventors:


Signature 	Date 
Print Name and Title You-Lo Hsieh	
Dept/ORU Textiles	
Rm & Bldg 227 Everson Hall	
Campus (Address if non-UC) Davis	
City/State/Zip Davis	
Telephone 530 752-0843	
Facsimile 530 752-7584	
Email ylhsieh@ucdavis.edu	

Signature	Date
Print Name and Title	
Dept/ORU	
Rm & Bldg	
Campus (Address if non-UC)	
City/State/Zip	
Telephone	
Facsimile	
Email	

Note: if there are more inventors please provide signatures, names and addresses on an additional sheet of paper.

## 16. Technically Qualified Witnesses (Two Required) - invention disclosed to and understood by:

  
a) Signature  
Printed Name: YUHONG WANG

  
b) Signature  
Printed Name: Hong Chen

Please submit the original completed Disclosure and Record of Invention Form, with signatures to:

Director, Technology Transfer Center - OVCR  
University of California, Davis  
508 Second Street, Suite 202  
Davis, CA 95616-4692

If you do not receive an acknowledgment within 30 days, please call the Technology Transfer Center at (530) 757-3432.

Note: When completed, the Disclosure and Record of Invention Form is an important legal document. Care should be taken in its preparation. Please refer to accompanying instructions. If you desire assistance, call the UC Davis Technology Transfer Center at (530) 757-3432. Information contained in this document is maintained in confidence by the UC Davis Technology Transfer Center and the UC Office of Technology Transfer. Normally it will not be released to others except with attorney-client privilege, to research sponsors as required by contract, or under appropriate secrecy agreements, until a patent application is filed, the information is published, a determination not to file a patent application is made, or as may be required by law. The information contained should not be disclosed to others outside the University, except as described in section 9, without the approval of the UC Davis Technology Transfer Center or the UC Office of Technology Transfer. It is often the practice of the UC Davis Technology Transfer Center and the UC Office of Technology Transfer to send your Record of Invention to other University employees for peer review.